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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,382	10/30/2001	Cornelis Antonie Maria Jaspers	NL 000601	5440

24737 7590 01/09/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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VIEAUX, GARY

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/022,382

Applicant(s)

JASPERS, CORNELIS ANTONIE  
MARIA

Examiner

Gary C. Vieaux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6 and 9 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Amendment***

The Amendment filed September 30, 2005 has been received and made of record. In response to the First Office Action, the Abstract, as well as claims 1 and 5 have been amended.

### ***Response to Amendment***

In response to Applicant's amended Abstract, the Examiner finds the amendment directly addresses the previous inconsistencies with the required format, and therefore, the objection to the Abstract is hereby withdrawn.

The First Office Action, dated July 1, 2005, informed the Applicant that the title of the invention was not descriptive, and that a new title was required which was clearly indicative of the invention to which the claims are directed. This issue was not addressed by the Applicant in the Amendment of September 30, 2005, and is therefore outstanding. However, since the Amendment of September 30, 2005, appears to be a bona fide attempt to provide a complete reply to the prior Office action, the amendment will not be deemed non-responsive based on this failure to respond and prosecution on the merits of the claims as currently amended will be continued.

### ***Response to Arguments***

Applicant's arguments, with respect to the rejection(s) of claim(s) 1-3, 5-7 and 9 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the

rejection has been withdrawn.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly  
5 indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

10 The specification shall conclude with one or more claims particularly pointing out and distinctly  
claiming the subject matter which the applicant regards as his invention.

**Claims 1 and 5** are rejected under 35 U.S.C. 112, second paragraph, as being  
indefinite for failing to particularly point out and distinctly claim the subject matter which  
applicant regards as the invention.

15 Limitations within a parenthetical context, e.g. "(R, G, B)", create ambiguity  
regarding their intended inclusion within the language of the claims. In order to cure this  
failure, it is recommended that Applicant either remove the parenthesis so that the  
limitation will be unmistakably included within the claim language or remove each entire  
parenthetical expression. For the purposes of rejection of the claims on their merits, the  
20 claims will be read without the indefinite parenthetical language.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
25 obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 5, 6 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US 5,668,596) in view of Jaspers et. al. (WO 99/04555), in further view of Juen (US 6,459,449.)

Regarding claims 1 and 5, Vogel teaches processing analog color signals which includes preprocessing of sensor output signals that consists of white balancing, analog to digital conversion, conversion of the signals to RGB, and digital RGB values being transformed to a set of color corrected values by processing in a color matrix operation (fig. 4, col. 5 line 46 – col. 6 line 7.) However, Vogel is silent as when the conversion of sensor output signals from analog to digital occurs, as well as the correction matrix depending on the analog preprocessing step, which in this case is white balancing.

Nevertheless, Jaspers is found to teach that white balance effected in the analog signal path offers a better quantization performance of the digital signal (col. 7 lines 29-31), with this white balance correction occurring prior to a reconstruction of the RGB colors (p. 7 lines 23-24) and based on the employment of a processor (fig. 6A, PROC), which when taken in light of the teaching of the use of digital signal processing (p. 5 lines 1-2), provides a teaching of this reconstruction occurring digitally and correlating to the reconstruction of a first basic color signal, a second basic color signal, and a third basic color signal from the digital signals. It is also noted that Jaspers teaches both white balance and matrix corrections (p.8 lines 25-27.) It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the conversion and

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processing of the signal as taught by Jaspers with the processing color signals as taught by Vogel so that quantization errors can be reduced.

Juen additionally teaches a correcting step in which a correction matrix employs input based on white balancing (col. 12 lines 7-16.) It would have been obvious to one of ordinary skill in the art at the time of the invention to include signal correction with the method as taught by Vogel and Jaspers so that the type of illuminating light is accounted for in color reproduction, thus ensuring that white object appear white (col. 5 lines 4-6.)

Regarding claims 2 and 6, Vogel, Jaspers, and Juen teach all of the limitations of claims 2 and 6, respectively (see the 103(a) rejection to claims 1 and 5, respectively, supra) including wherein the analog preprocessing step includes a white balance adjustment ('596 – col. 5 lines 56-61.)

Regarding claim 9, Vogel, Jaspers, and Juen teach all of the limitations of claim 9 (see the 103(a) rejection to claims 1 and 5, respectively, supra) including a sensor for generating sensor output signals ('596 – fig. 3; '555 - p. 13 line 19.)

***Allowable Subject Matter***

**Claims 3, 4, 7, and 8** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5        Regarding claims 3 and 7, the prior art is not found to teach or fairly suggest, in combination with the claims from which dependence is derived, an analog preprocessing step which includes correction matrix coefficients and correction operations as particularly claimed.

10       Regarding claims 4 and 8, the prior art is not found to teach or fairly suggest, in combination with the claims from which dependence is derived, an analog preprocessing step which includes the color signal multiplication and correction matrix operations as particularly claimed.

***Conclusion***

15       The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Katayama (US 5,917,556) discloses a method for correcting color that includes white balancing, RGB reconstruction, and matrix multiplication.

20       Rabbani et al. (US 5,412,427) discloses white balancing prior to conversion from an analog to a digital signal, before additional digital processing.

**Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 571-272-7318. The examiner can normally be reached on Monday - Friday, 8:00am - 4:00pm.

5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen T. Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for  
10 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Gary C. Vieaux  
Examiner  
Art Unit 2612

Gcv2

  
TUAN HO  
PRIMARY EXAMINER